

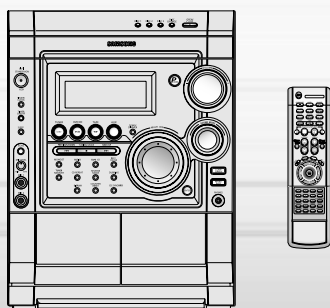
SUNG

3 DVD MINI COMPONENT SYSTEM

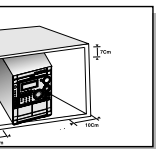
DVD/VCD/CD/MP3-CD/CD-R/RW
PLAYBACK

MAX-DS990

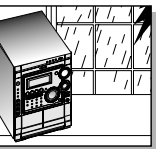
Instruction Manual



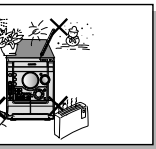
Precautions



power supply in your house complies with the identification sticker located on the back of your player. Install your on a suitable base (furniture), with enough space around it for ventilation (3-4 inches). Make sure the ventilation slots on top of the player. Do not place the player on amplifiers or other equipment which may become the player, ensure the disc tray is empty. This player is designed for continuous use. Switching off the DVD player does not disconnect the electrical supply. In order to disconnect the player completely from the power supply, plug from the wall outlet, especially when left unused for a long period of time.

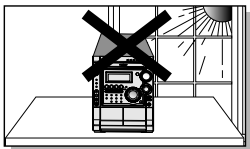
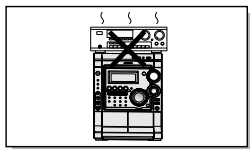


When disconnecting the AC main plug from the wall outlet, disconnect AC main plug from the wall outlet to prevent lightning could damage the unit.

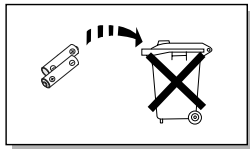


Do not expose the unit to direct sunlight or other heat sources. This could lead to overheating and malfunction of the unit.

Do not dispose of batteries in the general household trash.



Do not dispose of batteries in the general household trash.



The battery used with this product contain chemicals that are harmful to the environment. Do not dispose of batteries in the general household trash.

PREPARATION

PREPARATION

CONNECTIONS

OPERATION

SETUP

RADIO OPERATION

TAPE DECK

MISCELLANEOUS

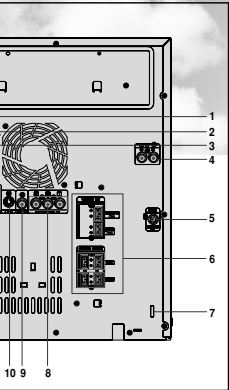
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PREPARATION



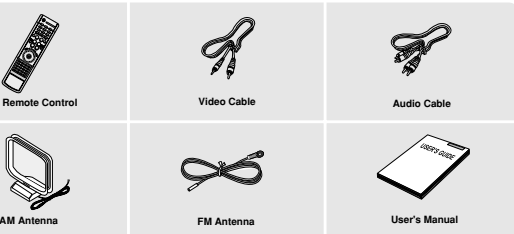
Panel



1. SW Antenna Connector (Option)
2. AM Antenna Connectors
3. FM Antenna Connector
4. LINE OUT
5. Sub woofer Control Jack
6. 5.1 Channel Speaker Output Terminals
7. Voltage Selector (Option)
8. Component Video Output Connectors
Connect a TV with component vide input jacks to these jacks.
9. Video Output Connector
Connect the TV's video input jacks (VIDEO IN) to the VIDEO OUT connector.
10. S-Video Output Connector
If the TV is equipped with an S-Video input connector (S-VIDEO IN), connect it to the player's S-Video output jack.
11. AUX-In

PREPARATION

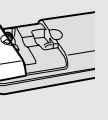
Accessories



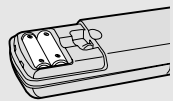
PREPARATION

Remote Batteries

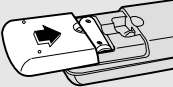
Slide the battery cover on the back of the remote by pushing down and sliding the cover in the direction of the arrow.



2 Insert two 1.5V AAA batteries, paying attention to the correct polarities (+ and -).



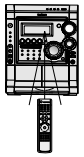
3 Replace the battery cover.



Follow these precautions to avoid leaking or cracking cells:
Place batteries in the remote control so they match the polarity:(+) to (+)and (-)to (-).
Use the correct type of batteries.Batteries that look similar may differ in voltage.
Always replace both batteries at the same time.
Do not expose batteries to heat or flame.

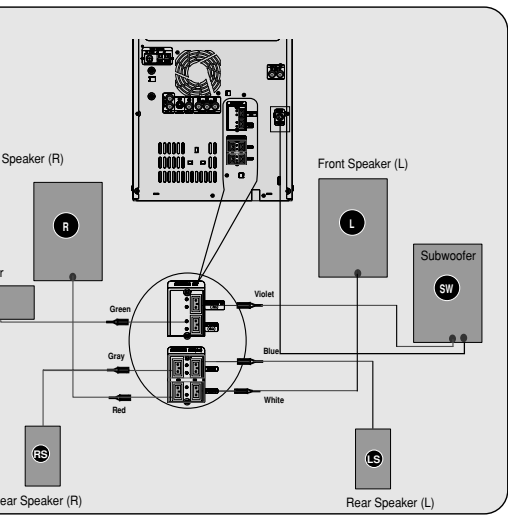
Operation of the Remote Control

The remote control can be used up to approximately 23 meters in a straight line. It can also be operated at an angle of up to 30° from the remote control.



To open the remote control cover, push the top of the cover, then slide downward.



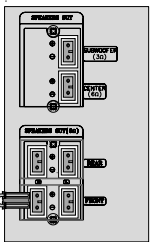


CONNECTIONS

the Main Unit

connecting jacks to the DVD player.

the colors of the speaker terminals
the colors of the connecting jacks.





P.SCAN (Progressive Scan) Function

Like regular Interlace Scan, in which two fields of picture information alternate to create the full picture (odd scan lines, then even scan lines), Progressive Scan uses one field of information (all lines displayed in one pass) to create a clear and detailed picture without visible scan lines.

Press the P.SCAN button on the remote controller for over 5 seconds in

Pressing the button for over 5 seconds will select "Progressive Scan" and "Interlace Scan".

Is Progressive (or Non-Interlaced) Scanning?

Interlace Scan (1 FRAME = 2 FIELDS)	Progressive Scan (FULL FRAME)
 <p>In Interlace Scan, a frame consists of two fields (odd and even), where each field contains only the horizontal lines in the frame. The odd-numbered lines are displayed first, and the even-numbered lines are displayed to fill in the alternating lines to form a single frame. Every 1/30th of a second, contains a total of 60 fields are displayed. This method is intended for capturing</p>	 <p>The progressive scanning method scans one full frame of video consecutively down the screen, line by line. An entire image is drawn at one time, as opposed to the interlaced scanning process by which a video image is drawn in a series of passes. The progressive scanning method is desirable for dealing with moving objects.</p>

This function works only on TVs equipped with component video inputs (Y, Pr, Pb) that support Progressive Video. (It does not work on TVs with conventional component inputs, i.e., non-progressive video inputs.) Depending on the brand and model of your TV, this function may not work.

Change the Video Format

Turn on the TV and then press **NTSC/PAL** on the Remote Control or **REC/PAUSE** on the Main Unit. The video format is set to "PAL".

When the button is pressed, the video format switches between "NTSC" and "PAL".

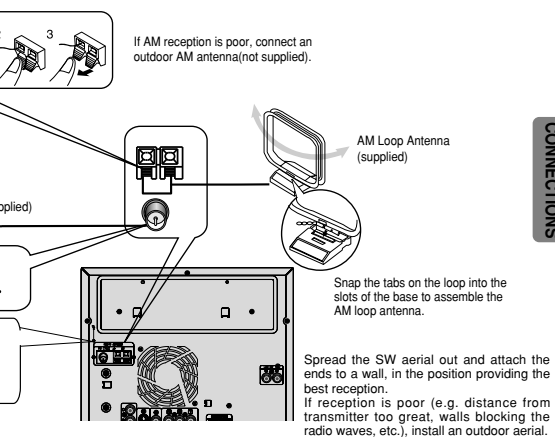
If your TV has a different video format standard.

When playing back, the video format of the disc must be the same as the video format of your TV.

CONNECTIONS



Connecting the FM, AM(MW) and SW(option) Antennas



CONNECTIONS

Connection

antenna supplied to the FM 75Ω terminal as a temporary measure.
antenna wire around until you have reception is good, then to other rigid surface.
connect an outdoor antenna.
5Ω coaxial cable (with a standard connector) connect the supplied FM antenna.

AM (MW) antenna connection

1. Connect the AM loop antenna supplied to the AM and π terminals.
2. If reception is poor, connect an outdoor single vinyl-covered wire to the AM terminal. (Keep the AM loop antenna connected).

The cooling fan dissipates the heat generated inside the unit so that the unit can be operated normally. The cooling fan is activated automatically to supply cool air to the unit.

Please observe the following cautions for your safety.

- Make sure the unit is well-ventilated. If the unit has poor ventilation, the temperature inside the unit could rise and may damage it.
- Do not obstruct the cooling fan or ventilation holes. (If the cooling fan or ventilation holes are covered with a newspaper or cloth, heat may build up inside the unit and fire may result.)

Disc Playback

Selecting a CD in the Disc changer

The **CD** function is automatically selected when Disc Skip is pushed.
To select a specific disc, press the corresponding **DISC (1, 2, 3)** button on the front panel or **DISC SKIP** on the remote control, until the required disc indicator flashes.
Result: All the discs will be played in turn, starting with the one selected.

- If you use the **DISC (1, 2, 3)** function when listening to the radio or to a tape, the system switches automatically to the CD mode.
- If the disc selected is not loaded, the next disc is played automatically.

OPERATION

DVD DVD-AUDIO VCD CD

- Playback starts automatically.

MP3 JPEG DivX

- Playback starts automatically.
- If the TV is on, a list of MP3s on the CD will appear on the TV screen.



Note

- Depending on the content of the disc, the initial screen may appear different.
- Depending on the recording mode, some MP3-CDs cannot be played.
- Table of contents of a MP3-CD varies depending on the MP3 track format recorded on the disc.

To stop playback,
press **STOP** during playback.

- If pressed once, "PRESS PLAY" is displayed and the stop position will be stored in memory. If **PLAY/PAUSE** (**▶/||**) button or **ENTER** button is pressed, playback resumes from the stop position. (This function works only with DVDs.)
- If pressed twice, "STOP" is displayed, and if **PLAY/PAUSE** (**▶/||**) button is pressed, playback starts from the beginning.

or temporarily pause playback,
press **PLAY/PAUSE** during playback.

To stop playback, press **PLAY/PAUSE**
in.

Bonus Group / Navigating Pages

Bonus Group

Some DVD-Audio discs have an extra 'bonus' group that requires a 4-digit key number to access. See the disc packaging for details and the key number.

When you play a DVD-Audio disc that has a bonus group, the key number input screen appears automatically.




OPERATION

Note

- If you eject the disc, switch the power off, or unplug the player, you will need to re-enter the key number.

Navigating Pages

During playback, press the  button on the remote control.

- You can select the desired image from a DVD-Audio disc containing still images.
- With some discs, you may not be able to select images depending on how the disc was manufactured.

ute Skip function

back, press the ◀, ▶ button.

en about 5 minutes after whenever you press ▶ button.

en about 5 minutes earlier whenever you press ◀ button.

tle Display

SUBTITLE button.

press the button, your selection will toggle between "SUBTITLE ON" and "SUBTITLE OFF".

only one subtitle file, it will be played automatically.

languages are supported.

OPERATION

eature Table

tain the audio and video data; these must be stored on CD in the ISO 9660 format.

	SPEC
DivX3.11	Up to the latest VERSION
WMV	WMV V1/V2/V3/V7
MP3	CBR : 80kbps~384kbps
AC3	CBR : 128kbps~384kbps
WMA	CBR : 56kbps~128kbps

MPEGs containing DivX can be divided into Video and Audio.

• **Video compatibility** : All versions of DivX later than 3.11 (including the latest 5.1) are supported. In addition, XviD is supported.

For WMV, V1, V2, V3, and V7 formats are possible.

The initial resolution is 720X480 and may support up to 720X576 .

• **Audio compatibility** : MP3s encoded at bitrates from 80kbps to 384kbps, AC3s from 128kbps to 384kbps, and WMAs from 56kbps to 128kbps are supported.

• **In addition, for subtitles, this unit will support Text format (SMI).**

ying the DivX disk, you can play the file with extension of AVI only.

e available DivX audio formats, DTS Audio is not supported.

is not supported for WMV files.

ning a subtitle file to a CD-ROM with your PC, be sure to burn it as an SMI file.

does not playing when its sampling frequency is lower than 32KHz.

he discs recorded in DivX or XviD depending on the way of recording could be

ck not correctly or couldn't be played back at all.

upport: MPEG1 LAYER3 (BITRATE : 128KBPS~320KBPS , SAMPLING FREQ.:

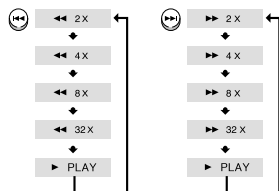
K/48KHz) .

Fast/Slow Playback

Fast Playback DVD VCD CD MP3

Press and hold **⏮️⏭️**.

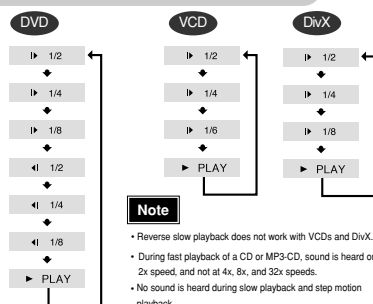
- Each time the button is held down during playback, the playback speed changes as follows:



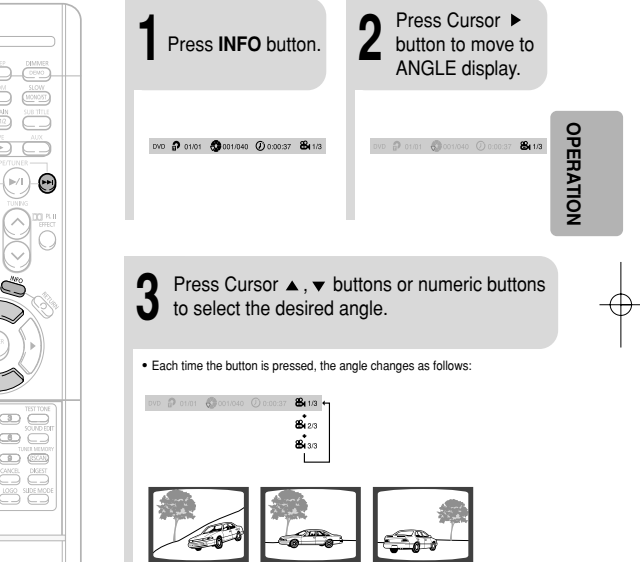
Slow Playback

Press **SLOW** button.

- Each time the button is pressed during playback, the playback speed changes as follows:



This function allows you to view the same scene in different angles.



DVD VCD CD

❖ To Select a Repeat Playback Mode in the Disc Information Screen

1 Press **INFO** button twice.

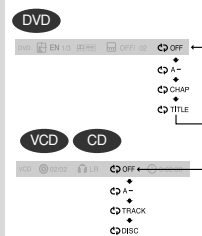
•For a VCD or CD, Press INFO button once.

2 Press Cursor **▶** button to move to REPEAT PLAYBACK display.

3 Press Cursor **▼** button to select the desired Repeat Playback mode.

4 Press **ENTER** button.

OPERATION



Note

- For MP3 and JPEG discs, you cannot select Repeat Play from the information display screen.
- For VCD Version 2.0 discs, you can select Repeat Play in PBC off mode.

Zoom Function

This function allows you to enlarge a particular area of the displayed image.

Zoom (Screen Enlarge) Function

DVD VCD

Zoom

2 Press Cursor \uparrow , \downarrow , \leftarrow , \rightarrow buttons to move to the area you want to enlarge.



3 Press ENTER button.

- Each time the button is pressed, the zoom level changes as follows:



OPERATION

Aspect Ratio

DVD

EZ VIEW button.

When the EZ VIEW button is pressed, the zoom function will switch between On

and Off. When the TV is played in Wide screen format, black bars at the top and bottom of the TV screen can be removed by pressing the EZ VIEW button.



The zoom function will not work if the DVD is recorded with multi-camera angle format. The zoom function may not disappear because some DVD discs have a built-in horizontal to vertical ratio.

Moving Directly to a Scene/Song

CD

0 button.

0:00:37 8x V11

Moving to a Title/Track

2

Press Cursor ▲, ▼ buttons or numeric buttons to select the desired title/track and then press ENTER button.

03:05 03:00:00 03:00:01 8x V11

Moving to a Chapter

3

Press Cursor ◀, ▶ buttons to move to Chapter display.

01:00 01:00 01:04:0 03:00:01 8x V11

Chapter

▲, ▼ buttons to select chapter and ENTER button.

0:00:01 8x V11

Moving to a Specific Time

5

Press Cursor ◀, ▶ buttons to move to time display.

01:00 01:00 01:00:00 01:17:30 8x V11

Moving to a Specific Time

6

Press the numeric buttons to select the desired time and then press ENTER button.

01:00 01:00 01:00:00 01:30:00 8x V11

OPERATION



numeric



Note

- You can press ◀◀▶▶ on the remote control to move directly to the desired title, chapter, or track.
- Depending on the disc, you may not be able to move to the selected title or time.

Digest Function

You can view 9 JPEG images on the TV screen.

Press **DIGEST** button during playback.

Images will be shown in 3x3 grid.



2 Press Cursor **▲, ▼, ◀, ▶** buttons to select the desired image and then press **ENTER** button.

- The selected image is played for 5 seconds before moving to the next image.

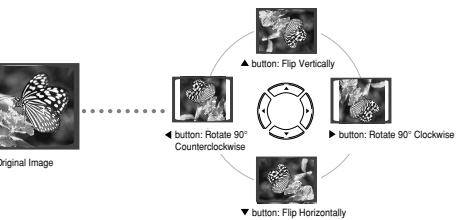


OPERATION

To move to the previous or next image with 9 windows, press **◀◀▶▶**.

Rotate/Flip Function

Press Cursor **▲, ▼, ◀, ▶** buttons during playback.



Using the Title Menu

For DVDs containing multiple titles, you can view the title of each movie.
Depending on the disc, this function may either not work at all or may work differently.

to mode Press
button.

2

Press Cursor ▲, ▼
button to move to
'Title Menu'.

3

Press **ENTER** button.

- The title menu appears.



OPERATION

ENTER button to exit the setup screen.

Language Code List

Use the appropriate code number for the initial settings "Disc Audio", "Disc Subtitle"
or "Disc Menu" (See page 33).

Language	Code	Language	Code	Language	Code	Language
Arabic	1181	Frisian	1334	Latvian, Lettish	1506	Slovenian
Azerbaijani	1183	Irish	1345	Malagasy	1507	Samoan
Basque	1186	Scots Gaelic	1347	Maori	1508	Shona
Catalan	1194	Galician	1349	Macedonian	1509	Somali
Cebuano	1196	Guarani	1350	Malayalam	1511	Albanian
Dutch	1203	Gujarati	1352	Mongolian	1512	Serbian
English	1209	Hausa	1353	Moldavian	1513	Siswati
Finnish	1217	Hindi	1356	Marathi	1514	Sesotho
French	1226	Croatian	1357	Malay	1515	Sundanese
German	1229	Hungarian	1358	Maltese	1516	Swedish
Greek	1233	Armenian	1363	Burmese	1517	Swahili
Hebrew	1235	Interlingua	1365	Nauru	1521	Tamil
Hindi	1239	Interlingue	1369	Nepali	1525	Tegulu
Indonesian	1245	Inupiak	1376	Dutch	1527	Tajik
Italian	1248	Indonesian	1379	Norwegian	1528	Thai
Japanese	1253	Icelandic	1383	Occitan	1529	Tigrinya
Korean	1254	Italian	1403	(Afan) Oromo	1531	Turkmen
Malay	1257	Hebrew	1408	Oriya	1532	Tagalog
Maltese	1261	Japanese	1417	Punjabi	1534	Setswana
Norwegian	1269	Yiddish	1428	Polish	1535	Tonga
Pashto	1283	Javanese	1435	Pashto, Pushto	1538	Turkish
Portuguese	1287	Georgian	1436	Portuguese	1539	Tsonga
Russian	1297	Kazakh	1463	Quechua	1540	Tatar
Samoan	1298	Greenlandic	1481	Rhaeto-Romance	1543	Twi
Serbian	1299	Cambodian	1482	Kirundi	1557	Ukrainian
Slovak	1300	Kannada	1483	Romanian	1564	Urdu
Slovenian	1301	Korean	1489	Russian	1572	Uzbek
Somali	1305	Kashmiri	1491	Kinyarwanda	1581	Vietnamese
Swahili	1307	Kurdish	1495	Sanskrit	1587	Volapuk
Swedish	1311	Kirghiz	1498	Sindhi	1613	Wolof
Tamil	1313	Latin	1501	Sangro	1632	Xhosa
Tegulu	1326	Lingala	1502	Serbo-Croatian	1665	Yoruba
Turkish	1327	Laothian	1503	Singhalese	1684	Chinese
Ukrainian	1332	Lithuanian	1505	Slovak	1697	Zulu

SETUP

Setting the TV Aspect Ratio (Screen Size)

The horizontal to vertical screen size ratio of conventional TVs is 4:3, while that of wide screen and high definition TVs is 16:9. This ratio is called the aspect ratio. When playing DVDs recorded in different aspect ratios, you should adjust the aspect ratio to fit your TV or monitor.

* For a standard TV, select either "4:3LB" or "4:3PS" option according to personal preference. Select "16:9" if you have a wide screen TV.

Full Screen : Select this to view a 16:9 picture in the full-screen mode on your wide screen TV.
• You can enjoy the wide screen aspect.



Letter Box : Select this to play a 16:9 picture in the letter box mode on a conventional TV.
• Black bars will appear at the top and bottom of the screen.



Pan & Scan : Select this to play a 16:9 picture in the pan & scan mode on a conventional TV.
• You can see the central portion of the screen only (with the sides of the 16:9 picture cut off).



SETUP



If a DVD is in the 4:3 ratio, you cannot view it in wide screen.
Since DVD discs are recorded in various image formats, they will look different depending on the software, the type of TV, and the TV aspect ratio setting.

Setting the Password

You can set the password for the Parental (rating level) setting.

MENU button.



2 Press Cursor ▼ button to move to 'Setup' and then press **ENTER** button.



3 Press Cursor ▼ button to move to 'PASSWORD' and then press **ENTER** button.



ENTER button.



5 Enter the password and then press **ENTER** button.



- Enter the old password, a new password, and confirm new password.
- The setting is complete.

SETUP



TURN button to return to the previous level.

CANCEL button to cancel the error numeric when you inputting password.

MENU button to exit the setup screen.

Change the Wallpaper

MENU

2 Press Cursor ▼ button to move to 'Setup' and then press ENTER button.



3 Press Cursor ▼ button to move to 'LOGO' and then press ENTER button.



SETUP



5 Press MENU button to exit the setup screen.

to select
'USER',
press



Press N button to return to the previous level.

Press button to exit the setup screen.

AV SYNC Setup

Video may look slower than the audio if it is connected with digital TV.
In this case, adjust the delay time of audio to optimal status to fit the video.

Press the **MENU** button.

Menu appears.



2 Press Cursor **▲**, **▼** buttons to move to 'Audio' and then press **ENTER** button.

- 'Audio' menu appears.



Press Cursor **▲**, **▼** buttons to move to 'AV-SYNC' and then press **ENTER** button.

AV-SYNC menu appears.

4 Press Cursor **▲**, **▼** buttons to select the Delay Time of AV-SYNC and then press the **ENTER** button.

- You can set the audio delay time between 0 ms and 300 ms. Set it to the optimal status.



Press the **RETURN** button to return to the previous level.

Press the **MENU** button to exit the setup screen.

Setting the Test Tone

Press the Test Tone to check the speaker connections and to adjust the speaker levels.

to mode,
MENU

2

Press Cursor ▼ button to move to 'Audio' and then press ENTER button.



3

Press Cursor ▼ button to move to 'TEST TONE' and then press ENTER button.

- The test tone will be sent to L → C → R → RS → LS → SW in that order. If the ENTER button is pressed again at this time, the test tone will stop.



SETUP

Press the ENTER button to return to the previous level.

Press the EXIT button to exit the setup screen.



Continues to
next page

Press the TEST TONE button

Press the TEST TONE button.

Used as follows:

For CD, this will work

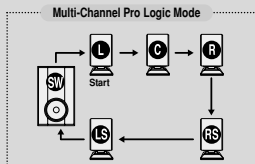
Check that each speaker is

and that there is no problem.

ne,

Press the TEST TONE button.

L: Front Speaker (L) C: Center Speaker SW: Subwoofer
R: Front Speaker (R) LS: Rear Speaker (L) RS: Rear Speaker (R)



46

or ▼ button
DELAY
then press
on.

4 Press Cursor ▲, ▼, ◀, ▶ buttons to move to the desired speaker and then press ENTER button.

5 Press Cursor ◀, ▶ to set the Delay time.

- You can set the delay time for C between 00 and 05mSEC and for LS and RS between 00 and 15mSEC.



SETUP

SPEAKER

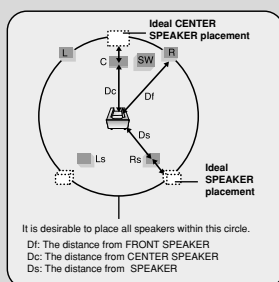
is equal to or longer than the figure, set the mode as 0ms. Otherwise, set the setting according to the table.

Distance Dc	Delay Time
0 ms	0 ms
1 ms	1 ms
2 ms	2 ms
3 ms	3 ms
4 ms	4 ms
5 ms	5 ms

SPEAKERS

is equal to the distance of Ds mode as 0ms. Otherwise, set the setting according to the table.

Distance Ds	Delay Time
0 ms	0 ms
3 ms	3 ms
6 ms	6 ms
9 ms	9 ms
12 ms	12 ms
15 ms	15 ms



manually adjusting with the SOUND EDIT button

Speaker Balance

Press **SOUND EDIT** button and then press Cursor

- 1

Adjusting Rear Speaker Balance

2 Press **SOUND EDIT** button and then press Cursor

0 R - 1

Adjusting Center Speaker Level

3 Press **SOUND EDIT** button and then press Cursor

CEN + 1

Speaker Level

Press **SOUND EDIT** button and then press Cursor

- 1

Adjusting Subwoofer Speaker Level

5 Press **SOUND EDIT** button and then press Cursor

SW + 1

SETUP

Front/Rear Speaker Balance

Adjust between 00 and -06 and OFF.
Loudness decreases as you move closer to -6.

Center/Rear/Subwoofer Speaker Level

Speaker level can be adjusted in steps from +6dB to -6dB.
Loudness gets louder as you move closer to +6dB and quieter as you get closer to -6dB.

AUDIO

- SPEAKER SETUP
- DELAY TIME
- TEST TONE
- SOUND EDIT
- DRC**


AV-SYNC : DmDec

SELECT RETURN EXIT

The screenshot shows the 'VIDEO' menu with the following options and their corresponding resolution values:

Option	Resolution
Full	1920 x 1080
640	640 x 480
480	480 x 320
270	270 x 180
OFF	OFF

The 'Full' option is selected, indicated by a white box around the 'Full' label and a white bar next to the '1920 x 1080' value.

- 

NU button to exit the setup screen.

Dolby Pro Logic II Effect

This function works only in Dolby Pro Logic MUSIC mode.

Press **PL II MODE** button to select 'MUSIC' mode.

MUSIC

2 Press **PL II EFFECT** button and then press Cursor **◀ ▶** buttons to select the mode.

- You can select either 0 or 1.

PROLOG 1

Press **PL II EFFECT** button and then press Cursor **◀ ▶** buttons to select the mode.

- You can select between 0 and 7.

C-WIDTH 2

4 Press **PL II EFFECT** button and then press Cursor **◀ ▶** buttons to select the mode.

- You can select between 0 and 6.

DIMEN 6

SETUP

When playing a DVD disc encoded with two or more channels, multi-channel mode will be selected automatically and **PL II** (Dolby Pro Logic II) button does not work.

This mode extends the front stereo image to include the surround speakers for an exciting "wraparound" effect with side wall imaging.
PROLOG II: Sound is output to the center speaker only. The front left and right speakers produce phantom sound.
Incrementally adjusts the sound field (DSP) from the front or rear.

Presetting Stations

You can store up to:

- ♦ 15 FM stations
 - ♦ 5 MW stations
 - ♦ 5 SW1 stations
 - ♦ 5 SW2 stations
- or ♦ 15 FM stations ♦ 15AM stations

FM 89.1 in the memory

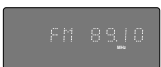
(AND) select d.

on is pressed, between 1,2)\".



2 Press  to select "89.10".

- Refer to Step 2 on page 41 to automatically or manually tune in to a station.



3 Press the **TUNER MEMORY** button.

- "PROGRAM" flashes in the display.



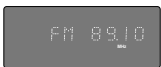
►► to set

between 1 and



5 Press the **TUNER MEMORY** button.

- Press the **TUNER MEMORY** button before "PROGRAM" disappears from the display.
- "PROGRAM" disappears from the display and the station is stored in memory.




6 To preset another station, repeat steps 2 to 5.

Note

- When listening AM/SW , **DOLBY II** (Dolby Pro Logic II) button does not work.

RADIO OPERATION

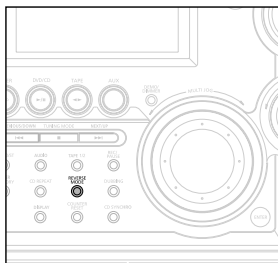
to a preset station, press  on the control to select a channel.

Setting the Cassette Playback Mode

This component system has three cassette playback modes which allow you to listen to both sides of a cassette automatically.

REVERSE MODE until the appropriate track is played.

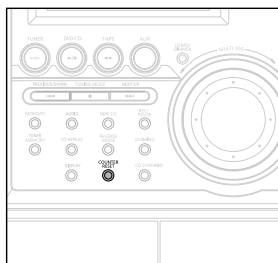
1. Press the **REVERSE** button on the front panel of the selected cassette and then stops. 2. Press the **REVERSE** button on the front panel of the cassette. 3. Press the **REVERSE** button on the front panel of the cassette and then stops. 4. Press the **REVERSE** button on the front panel of the cassette indefinitely until you



Counter

1. Press the **REVERSE** button on the front panel of the selected cassette and then stops. 2. Press the **REVERSE** button on the front panel of the cassette. 3. Press the **REVERSE** button on the front panel of the cassette and then stops. 4. Press the **REVERSE** button on the front panel of the cassette indefinitely until you

1. Press the **REVERSE** button on the front panel of the selected cassette and then stops. 2. Press the **REVERSE** button on the front panel of the cassette. 3. Press the **REVERSE** button on the front panel of the cassette and then stops. 4. Press the **REVERSE** button on the front panel of the cassette indefinitely until you



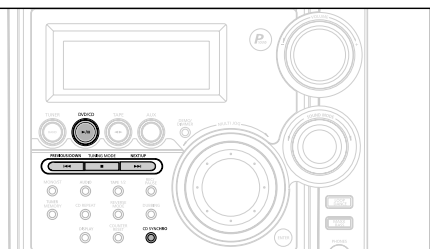
TAPE DECK

Recording a Compact Disc

You can record a compact disc on a cassette in two different ways:

Manual recording

This method allows you to synchronize the start of the recording with the start of the disc or track of your choice



system
sing
ON.

2 Insert a blank cassette in Tape 2.

- Press the **PUSH/EJECT** button (▲) to open the cassette door, insert a cassette, and then close the cassette door.
- Insert the cassette with the safety tabs.

3 Load a compact disc.

- Press the **OPEN/CLOSE** button (▲) to open the CD door.
- Insert a CD and press the **OPEN/CLOSE** button (▲) to close the CD door.

DVD/CD
on.

5 Press CD SYNCHRO button.

- When stopped, press the button to start the recording from the first piece of music.
- Press and hold **CD SYNCHRO** button during the playback of CD to start the recording from the first part of the music being played.

6 To stop recording, press ■ button.

Note

- You can use **CD/SYNCHRO** button only in CD Playback Mode.
- In Recording, DPL II doesn't work.


TAPE DECK

Canceling the Timer

After having set the timer, it will start automatically as shown by the **TIMER** indication on the display. If you no longer wish to use the timer, you must cancel it.



To cancel the timer, press **TIMER ON/OFF** once.

-  is no longer displayed.

To resume the timer, press **TIMER ON/OFF** again.

-  is displayed again.

Note

- You can cancel the timer while the power is on or while the player is in standby.

MISCELLANEOUS

Sleep Timer Function / Mute Function

Sleep Timer Function

You can set the time that the DVD player will shut itself off.

Press **SLEEP** button.

- Each time the button is pressed, the selection changes as follows:
90 MIN → 60 MIN → 45 MIN → 30 MIN → 15 MIN → OFF.



To confirm the sleep timer setting, press **SLEEP** button.

- The remaining time before the DVD player will shut itself off is displayed.
- Pressing the button again changes the sleep time from what you have set earlier.

To cancel the sleep timer, press **SLEEP** button until
OFF appears on the display.

Mute Function

This is useful when answering a doorbell or telephone call.

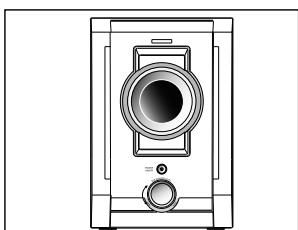
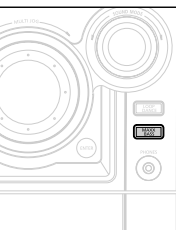
Press **MUTE** button.

- 'MUTE' appears in the display.
- To turn off mute, press the button again.



MISCELLANEOUS

MAXX BASS LEVEL Function/SUB WOOFER LEVEL Function



MAXX BASS Level Function

utilizes the principle of the missing fundamental, which creates the sensation of bass by generating a carefully calculated series of harmonics designed to simulate the experience caused by the missing fundamental pitch. These harmonics extend the frequency response up to two-third or 1 1/2 octaves below the physical speaker cutoff without perceived distortion or increased power consumption. MAXX BASS function provides thudding sound effects.

MAXX BASS button on the front panel to select:

2 You can select the level of low tones you desire.

M-BASS 2 → M-BASS 3 → M-BASS 4 →

Subwoofer Level Function

Adjust sub woofer level with the SUB WOOFER OUT SYSTEM CONTROL Jack.

POWER ON/OFF switch on the front panel.

2 Turn the **SUB WOOFER LEVEL** knob to adjust the subwoofer volume.

MISCELLANEOUS

Precautions on Handling and Storing Discs

Small scratches on the disc may reduce sound and picture quality or cause breaks in playback. Be especially careful not to scratch discs when handling them.

Handling discs



Do not touch the playback side of the disc. Hold the disc by the edges so that fingerprints will not get on the surface.
Do not stick paper or tape on the disc.

Cleaning and Storing Discs



When you get fingerprints or dirt on the disc, clean it with a mild detergent diluted in water and wipe with a soft cloth.

- When cleaning, wipe gently from the inside to the outside of the disc.

Note

- Condensation may form if warm air comes into contact with cold parts inside the player. When condensation forms inside the player, the player may not operate correctly. If this occurs, remove the disc and let the player stand for 1 or 2 hours with the power on.

Precautions When Using Audio Cassettes

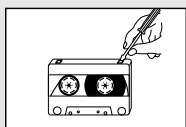
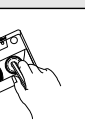
Make sure the tape in the cassette is sufficiently taut.

When erasing a cassette that you wish to keep, remove the safety tab on the upper edge of the cassette. To record a cassette, where the tab has been broken, simply cover the opening with adhesive tape.

After finishing playing a cassette, always put it back in its case.

Store cassettes in a clean place, out of direct sunlight, where they will not be exposed to high humidity.

Do not use 120-minute cassettes as they place unnecessary strain on the tape mechanism.




MISCELLANEOUS

Problem	Check/Remedy
Audio language and subtitles do not work.	<ul style="list-style-type: none"> Audio language and subtitles will not work for DVDs not containing them. And depending on the disc, they may work differently.
Menus do not appear even when the function is selected.	<ul style="list-style-type: none"> Are you using a disc that does not contain menus?
Full screen cannot be selected.	<ul style="list-style-type: none"> You can play 16:9 DVDs in 16:9 WIDE mode, 4:3 LETTER BOX mode, or 4:3 PAN SCAN mode, but 4:3 DVDs can be seen in 4:3 ratio only. Refer to the DVD disc jacket and then select the appropriate function.
Playback does not start.	<ul style="list-style-type: none"> The TAPE function has not been selected. The cassette has not been inserted correctly. The cassette player has not been closed. The tape is either slack or broken.
Playback is not smooth if the tape is not erased correctly or has wow and flutter.	<ul style="list-style-type: none"> The audio heads are dirty. The rollers or drive capstans are dirty. The tape is worn.
No sound from the radio.	<ul style="list-style-type: none"> Is the antenna connected properly? If the antenna's input signal is weak, install an external FM antenna in an area with good reception.
The power does not work properly. (The power goes out or the sound is not heard.)	<ul style="list-style-type: none"> Turn off the power and hold the P.Sound button on the main unit for longer than 5 seconds. <p>Using the RESET function will erase all stored settings. Do not use this unless necessary.</p>
The preset memory for rating is not working properly or has been forgotten.	<ul style="list-style-type: none"> While the player is in "NO DISC" mode, hold the main unit's TUNING MODE button for longer than 5 seconds. "INITIAL" appears on the display and all settings will return to the default values. Press the POWER button. <p>Using the RESET function will erase all stored settings. Do not use this unless necessary.</p>



MISCELLANEOUS

Notes on Terminology

	Recorded onto some DVD discs are scenes which have been simultaneously shot from a number of different angles (the same scene is shot from the front, from the left, from the right, etc.). With such discs, the Angle button can be used to change the angle of view for specific scenes.
CHAPTER	These numbers are recorded on DVD discs. A Title is subdivided into many sections, each of which is numbered, and specific parts of the video can be searched quickly using these numbers.
DVD	A high-density optical disc on which high-quality pictures and sound have been recorded by means of digital signals. Incorporating a new video compression technology (MPEG-2) and high-density recording technology, a DVD disc comprises two 0.6 mm thick discs bonded together.
DOLBY DIGITAL	An acronym for Pulse Code Modulation - another name for digital audio.
PAUSE	This is recorded on a video CD (version 2.0). Selected scenes or information can be chosen from the menu displayed on the TV monitor.
REGION	Both the DVD player and DVD discs are encoded with a region number. If the region number on the DVD disc does not correspond to the region number of the DVD player, the player cannot play the disc.
SUBTITLE	Translated appearing at the bottom of the screen. A DVD disc can contain up to 32 subtitle languages.
TITLE	These numbers are recorded on DVD discs. When a disc contains two or more movies, these movies are numbered as Title 1, Title 2, etc.
TRACK	These numbers are assigned to the tracks which are recorded on video and audio CDs. They enable specific tracks to be located quickly.
VIDEO CD	Contains recordings of pictures and sound whose quality is roughly comparable to that of video tape. This player also supports video CDs with playback control (version 2.0).
Y L	5.1 (or 6) Channel Digital Surround sound reproduced from DVDs and LDs recorded as digital signals (with  disc marking). With better sound quality, dynamic range, and directionality than traditional Dolby surround technology, you can enjoy dynamic, realistic sound.



MISCELLANEOUS

emo



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